Personal memo from
JOSHUA LEDERBERG

Hon. Richard Danzig
Under Sec. Navy

AUG 31 1994

BW Biodefense – evolution.

Dear Dick

Thank you for the update. I am glad to see your unremitting attention, and some signs of progress.

I'm making contacts in NSC + FEMA re the civilian side.

As to evolution, you've picked out some of the weak points. But you don't have to reach high prevalence of a new gene, only enough that there is some chance that it can recombine (additively) with another. Then you can get a few genotypes with a substantial selective advantage.

We marvel at the few situations where all this works. We still don't have X-ray vision or any

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x.. o→ with CDC

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number of other potential goodies that may reflect pathways that never did make it.

Glad to discuss further and take you up on tuition.

It might be Nov. 1 or 2.

Shall we hold those dates for a bit?

Yours,

J.L.

I'll be in the Pentagon before that but not eve.-free: I'll give you a call.

J

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P.S.

I would not at all insist that all mutations are random. Rapidly evolving (organ) systems may well have an atypical mutation rate.

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